the ball joint to the nozzle **47**, the base of the ball disposed opposite the depression **52** is provided with an opening **56** which communicates directly with the central bore **37** into which the nozzle body **33** is fitted. The passage **45** in the nozzle body, as may be seen, leads directly to the nozzle orifice itself, thereby providing direct communication.

Since the position of the nozzle body is adjustable within a spherical plane determined by the movement of the ball within the socket, the depression **52** is enlarged at **60** so that the area of the depression is substantially greater than that of the opening **56**. Thus, rotation of the ball within specified limits, will in no way inhibit the flow of fluid from the depression **52** into the opening **56** which remains within the confines of the mouth **60** of the pocket. In addition, in order to seal the depressions **52** against leakage of fluid therefrom, a seal groove **62** is provided at the mouth of the pocket, and a seal **64**, such as an O-ring seal is fitted therein and bears against the groove **62** and the surface of the ball to form a fluid tight seal, while permitting the ball to move within the socket.

The fluid in inlet **16** is likewise in communication with the socket within the body by means of a passage **67** which opens into a groove **69**, machined, or otherwise formed in the wall of the socket of the body **12**. The groove is annular, extending about the waist of the socket and is aligned with, and exposed to, a slot **71** formed in the ball transverse to the axis of the passage **37**, which, for purposes of this disclosure, shall be considered an axis of rotation of the ball within the socket. The slot **71** cuts deeply into the ball, but stops short of the central passage **37** so as to maintain suitable separation. Passages **73** are drilled or otherwise formed in the ball parallel to the main passage **37** so as to communicate with the slot **71**, thereby providing fluid communication to an annular groove **73** formed on the flat **39** on the face of the ball.

In order to provide fluid communication between the ball and the nozzle, the nozzle body **33** is grooved at **77** and the gasket or washer **43** is perforated so as to permit fluid communication between the grooves **75** and **77** without permitting leakage. Thus complete and unrestricted fluid communication is provided to the nozzle body. A passage **79** connects the groove **77** with a chamber **82** behind the nozzle itself, and that chamber is in communication with orifice outlets **83** to permit the fluid entering the port **16** to be emitted from the nozzle. It will thus be appreciated that the illustrated construction maintains the fluids entering the ports **14** and **16** discrete at all times.

The size of the groove **69** is such as to permit the ball to rotate without blocking or inhibiting the communication between the groove and the flat **71**. Thus, in accordance with a feature of the invention, fluid communication is maintained, even though the ball is rotated or moved within the socket to any of the variety of permissible positions. In order to segregate the fluid entering port **16**, a second O-ring seal **85** is provided which seats between a flat **86** formed on the inner surface, the cap **24** and the leading edge of the body **12**. Thus, the O-rings **62** and **85** segregate the fluid in the groove **69** from the fluid in the pocket **52** at all positions of the nozzle body itself.

Reference to FIGURE 3 will make clear the wide range of positions which the nozzle body is able to assume by virtue of the present construction. A circle A indicates the practical limits of movement of the nozzle body with respect to the body **12**. These limits, in the present instance, are determined by the distance between the shoulder **87** and the face **88** of the retainer cap. It will be appreciated that other spout means may be provided for limiting movement and that the amount of movement provided is a matter of choice rather than invention. It has been found that an included angle α of approximately 40° taken from a focal point F (FIGURE 2) provides a very good range of adjustment.

Again referring to FIGURE 3, it will be seen that the construction of the present invention is particularly useful with a nozzle which emits a flat spray pattern. This is so because the ball may be rotated about a central axis, and moved anywhere within the confines of the circle A, thereby permitting complete adjustment of the spray pattern to the desired position. Nozzle assemblies of this type are useful in the lubrication of gears where a lubricant is fed from a reservoir into the port **14** under pressure, and air is discharged under pressure into the port **16**. The air which is ejected through the orifice **83** atomizes the oil being ejected through the main orifice thereby providing optimum coverage of areas of contact between gears in the immediate vicinity. The spray may be directed to any one or more gears within the area without adjusting the position of the main body portion **12** by simply rotating or moving the nozzle to provide the desired coverage. It will further be understood that this may be done by virtue of the seals, without relieving pressure within the nozzle itself. Thus, adjustability is provided without danger of leakage even under operating conditions. This feature permits the operator to see exactly where the spray is being directed while he is making the necessary adjustments, and it is not necessary for him to alternately turn the unit on and off during adjustment.

The assembly is also of value with nozzles which provide different spray patterns, and for any one of a number of wide variety of uses within the art.

I claim as my invention:

1. A multiple fluid nozzle assembly having a nozzle which is selectively positionable within an area defining a spherical segment, comprising a body portion, defining a socket therein, a ball mounted for swivel movement in said socket, a cap attached to said body over said socket for retaining said ball movably confined therein, and a nozzle body secured to said ball, the inner peripheral walls of said socket having an annular groove of predetermined width formed therein, and a depression formed in the base of said socket defining a pocket, said ball having an annular slot formed therein in alignment with the groove in said socket, and a central passage therethrough adapted to provide fluid communication between said nozzle body and said pocket, means defining a fluid seal about said groove, a passage formed in said body portion in communication with said groove, and a passage in said ball between said slot and said nozzle body, whereby fluid communication is provided between said body portion and said nozzle body throughout selective positioning of the latter relative to the former.

2. The apparatus set forth in claim **1** wherein a portion of said ball protrudes beyond said cap, said portion having a flat formed thereon for mounting said nozzle body, an annular groove formed through said flat and disposed about said central passage, a passage in said ball between said annular groove on said flat and slot, and means in said nozzle body in fluid communication with said annular groove and central passage when said nozzle and ball are engaged.

3. An adjustable ball and socket joint for use in adjustably connecting members having multiple fluid passages therethrough, comprising a first member having a ball formed thereon, a second member defining a complementary socket for receipt of said ball, and socket having independent fluid passages opening therein, said ball having fluid passages therethrough, the passages in said ball communicating with openings on the surface thereof so as to be in fluid communication with the openings in said socket when said ball is positioned therein, the openings in one of said members being enlarged at the point of communication with the other said member so as to permit relative movement of said ball within said socket while retaining fluid communications between the respective passages formed therein, and sealing means between said passages for maintaining the same segregated to